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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,145	05/21/2007	Jakob Ehrensvaerd	STOCP0135USA	1572
23908 7590 05/20/2010 RENNER OTTO BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE NINETEENTH FLOOR CLEVELAND, OH 44115				
EXAMINER LE, THIEN MINH				
ART UNIT 2887		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/598,145

Applicant(s)

EHRENSVAERD, JAKOB

Examiner

THIEN M. LE

Art Unit

2887

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/DP)
Paper No(s)/Mail Date 8/18/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

The information disclosure statement filed on 8/18/2006 has been entered.

Claims 1-18 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors

Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology

Technical Amendments Act of 2002 do not apply when the reference is a U.S.

patent resulting directly or indirectly from an international application filed before

November 29, 2000. Therefore, the prior art date of the reference is determined

under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 3-4, 7, and 13-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Hind et al. (Hind et al. – 2007/0152033; herein after referred to as Hind).

Regarding claims 1 and 13-14, Hind discloses a RFID tag 100 for collecting transactions data for communication with a host computer (registrar as described by Hind). The RFID tag 100 (figure 1) comprises a non-volatile memory (see quotes cited below) and fields for uniquely storing transaction records and associated non-retrievable cryptographic key (figures 3A-3F, 4 and 5). The following quotes that are relied upon are herein provided for further reviews:

[0005] A representative RFID tag 100 of the prior art is illustrated in FIG. 1, showing a coiled antenna 120 (which in this example takes on a generally square shape) embodied on some type of substrate 130. The tag 100 includes an integrated circuit 110 containing non-volatile memory, logic circuitry, and communications circuitry. This integrated circuit is attached to antenna 120, which may be implemented as an inductor coil. The substrate 130 onto which the electronic equipment is fabricated may be, for example, a clear, flexible film.

[0036] Preferred embodiments write the ownership data, secured with public key encryption techniques, onto a non-volatile memory on the RFID tag of a product using a read/write RFID transponder, although traditional indelible marking techniques such as engraving, bar codes, 2-dimensional or matrix codes could also be used advantageously for writing this secured ownership data. Alternative embodiments write the secured ownership data on existing products that already contain data memories and input/output capabilities, such as computers and peripherals, pervasive computing devices, consumer electronics, and appliances. (Commonly-assigned and co-pending U.S. Pat. No. 7,069,452, entitled "Methods, Systems and Computer Program Products for Secure Firmware Updates", and U.S. Pat. No. 6,976,163, entitled "Methods, Systems and Computer Program Products for Rule Based Firmware Updates Utilizing Certificate Extensions and Certificates for Use Therein", disclose techniques for creating a secure memory within the flash memory of computing devices, consumer electronics, and appliances. The teachings in these commonly-assigned inventions, which were filed on Jul. 12, 2000 and have Ser. Nos. 09/614,982 and 09/614,983, respectively, may be leveraged by alternative embodiments which write ownership data into products containing data memory.)

[0046] Preferably, the digital signature value 340 is computed over fields 310 through 330 (i.e., the entire contents of record 300). As is well known in the art, use of digital signatures generally comprises computing a hash value over a set of fields (such as fields 310 through 330), and then encrypting this hash value using a private key value (in this case, the private key of the registrar) with public key encryption techniques. The resulting digital signature stored in field 340 can then be decrypted only with the registrar's associated public key from the public/private key pair which is represented by the registrar's security certificate (which in preferred embodiments is identified by the short ID within the GUID 331, as has been discussed). If a newly-computed hash over the same set of fields is identical to the decrypted hash value, then the values of those fields were not changed from the values used by the registrar when originally computing the digital signature. In this manner, the digital signature field 340 can be used to determine whether the recorded ownership transfer transaction is legitimate.

Regarding claims 3 and 17, see figures 3A-3F and 8 for the time keep log for generating the time stamps when the past and recent transactions have occurred.

Regarding claim 4, Figure 4 of Hind discloses the method of transmitting transaction data and ownership data to the registrar and that the communication is a secured transmission. Since the communication is done using RF technologies, the address of the registrar are inherently stored in the memory of the RFID chip during data transfer so that information can be transmitted to trusted agent (figures 4-6, par. 0057, 0058, 0059, 0060).

Regarding claims 7, 15-16 and 18, see the discussions regarding claim 1. Hind further discloses that the registrar can be operated by a third party and thus would embrace the limitations set forth in these claims (see par. 0083, 0084, 0089).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-6 rejected under 35 U.S.C. 103(a) as being unpatentable over Hind et al. (Hind et al. – 2007/0152033; herein after referred to as Hind) in view of Elston et al. (Elston et al. – 2002/0120582; herein after referred to as Elston).

Regarding claims 5-6, see the discussions regarding claim 1. The claims differ in calling for a specific type of encryption algorithm such as symmetric and/or asymmetric algorithms. Reference to Elston is cited as an evident showing the conventionality of the method of using symmetric or asymmetric algorithms for generating electronic security credentials for RFID tags or modules (see cited quotes below). It would have been obvious to implement different encryption and decryption algorithms in the system as taught by Hind. The modification is merely a substitution of an art recognized equivalent and thus is not considered novel in light of the teachings of Elston. The following quotes from Elston that have been relied upon are herein provided for further reviews:

[0173] Alternatively, electronic security credentials can be used. These credentials can use symmetric or non-symmetric Public Key Infrastructure (PKI), a hash of an account number or other account identifier with a PIN or password, or symmetric or asymmetric secret key cryptography. These credentials can be contained within various types of customer controlled electronic devices (52),

including wired and wireless Internet devices, wired or wireless telephone devices, Radio Frequency Identification (RFID) devices, magnetic cards, or smart cards. These electronic credentials typically require the customer to enter a password or PIN to complete the authorization. In these situations, authorization is based on the combination of something the customer possesses and something the customer knows.

Claims 1-2 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vock et al. (Vock et al. – 2007/0152033; herein after referred to as Vock) in view of Elston et al. (Elston et al. – 2002/0120582; herein after referred to as Elston).

Regarding claims 1-2, Vock discloses a sensor module having battery, non-volatile memory for storing data such as impact data, humidity data, temperature, etc., for later retrieval or real-time transmission to a host computer (see figures 33, 72, 73, 66, 64, 61 and their descriptions; sensor and real-time clock such as figure 10A). The claims differ in calling for an encryption algorithm for providing secured credentials and transmissions. Reference to Elston is cited as an evident showing the conventionality of the method of using symmetric or asymmetric algorithms for generating electronic security credentials for RFID tags or modules (see cited quotes below). It would have been obvious to implement different encryption and decryption algorithms in the system as taught by Elston in Vock's system. The modification provides secured data storage and data transmissions to Vock's system. The modification also extends Vock's teachings to environments wherein valuable and personal products are being monitored.

Regarding claims 8-10, Vock discloses the use of printed circuit board in that the sensors are connected to the sensors module's elements such as processor, memory, battery by conductive traces that are provided in the printed circuit board (see Summary of the Invention).

Regarding claims 11 and 12, see the discussions regarding claim 1. Further see descriptions of figures 2A, 8, 33, 72, 73. The following quotes that are also relied upon are herein provided for further reviews:

(53) Event Monitoring Devices

(54) The invention also provides certain sensors and devices used to monitor and report temperature, humidity, chemicals, heart rate, pulse, pressure, stress, weight, environmental factors and hazardous conditions.

(55) In one aspect, the invention provides a event monitor device ("EMD") including an adhesive strip, a processor, a detector, and a communications port. In another aspect, two or more of the processor, port and detector are combined in a single application specific integrated circuit ("ASIC"). In one aspect the detector is an humidity or temperature sensor, and preferably that detector is embedded into silicon within the ASIC. In other aspects, the detector is one of an EKG sensing device, weight-sensing detector, and chemical detector. In still another aspect, the EMD includes a battery. In the preferred aspect of the invention, the EMD and battery are packaged in a protective wrapper. Preferably, the battery is packaged with the EMD in such a way that it does not "power" the EMD until the wrapper is removed. Preferably, the EMD includes a real time clock so that the EMD tags "events" with time and/or date information.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THIEN M. LE whose telephone number is (571)272-2396. The examiner can normally be reached on Monday - Friday from 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve S. Paik can be reached on (571) 272-2404. The

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fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thien M. Le/
Primary Examiner, Art Unit 2887